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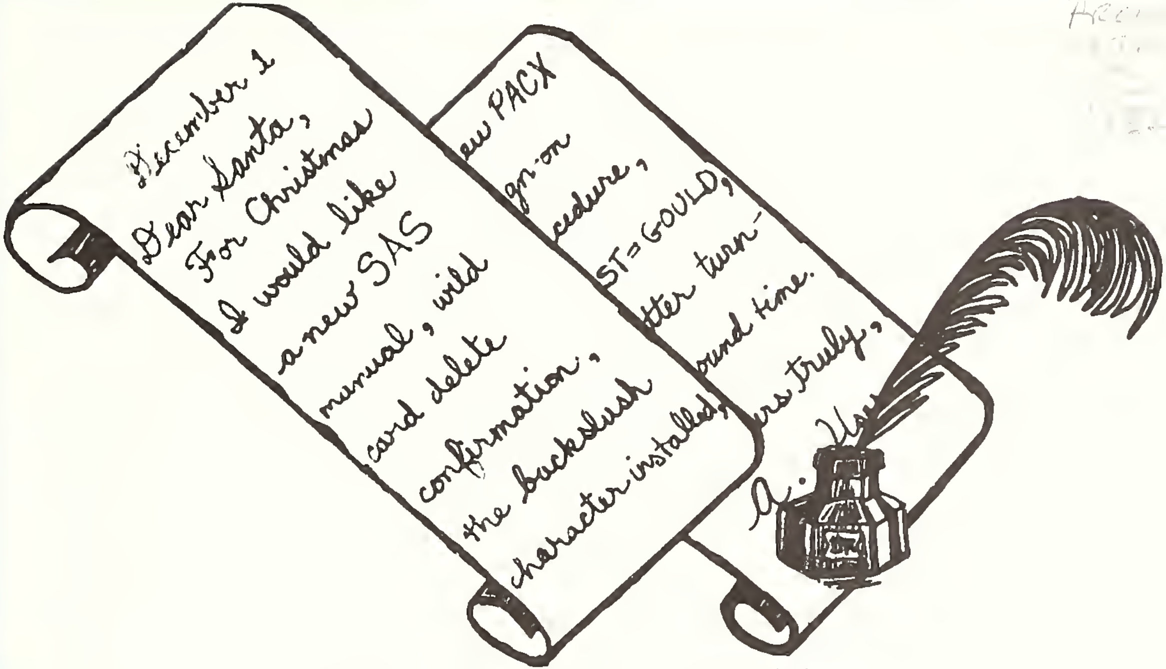
computing services

UTCS
Computer News



For more information, look inside this issue.

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Best Wishes for the Holiday Season

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Dialogue

This is the second issue of *COMPUTERNEWS* since I accepted the position of Editor. I have mixed feelings about these first two issues. It feels good that these issues appeared on schedule, that the majority of content is "made at U of T" rather than reprinted from other sources, and that articles are beginning to focus on how to take advantage of the services UTCS can provide. It feels uncomfortable that there is so little user feedback regarding *COMPUTERNEWS,* that some segments of UTCS are not reflected in its pages, and that pending staff reductions will make it even more difficult to maintain, much less improve, the quality of *COMPUTERNEWS.*

Most of the credit for meeting deadlines must go to the Publications staff. Their cooperation has made it possible for me to focus my energies on content rather than the mechanics of publishing. The results of this are just beginning to show. Two features begin in this issue: a series on how to provide data security on UTCS systems, and a series of UTCS staff profiles (see *Security for User Data and Accounts* and *Staff Profile: Information Assistant* respectively). A cumulative index of *COMPUTERNEWS* for 1982 appears in this issue also. In each case, the emphasis is on making our services and information accessible. The letter to the editor published in this issue reflects some of my own concerns about *COMPUTERNEWS.* It is encouraging and very helpful to receive such constructive criticism from readers. It is discouraging that this was the only reader this month who felt stongly enough to comment on *COMPUTERNEWS.* Without this type of feedback, *COMPUTERNEWS* can only remain a reflection of the editor's assumptions about what readers need and want.

I have shared a few of my feelings — because feelings are very much a part of a service organization. UTCS exists to help users gain full advantage from computing. Emotions are always involved when people interact, even when the subject material is computers. Emotions suppressed eventually destroy relationships; emotions accepted and carefully expressed can be a catalyst for change.

How do you feel about computing at the University of Toronto? Let me know and perhaps *COMPUTERNEWS* can become a dialogue, not a monologue.

Bill Fehlner

Staff Profile: Information Assistant

Who's helping the users at the Information Office now?

Dale Wright, a former Text Entry Operator, now holds the position of Information Assistant in the Information Office, 11 King's College Road, Engineering Annex, Room 206.

This change, a result of the redeployment within UTCS, came as a pleasant surprise to Dale, who enjoyed working in Text Entry helping students and professors prepare their theses, papers and documentation. Through the Information Office, Dale maintains daily contact with the user community on a more varied and frequent basis, either directly or through telephone inquiries. She enjoys meeting people and being helpful. "That's always been of importance to me in my work" says Dale. Just what does Dale do? Read on and find out if you should be talking to her at the Information Office.

continued...

Staff Profile continued

There are three areas in particular that Dale now takes care of: 1) general user inquiry, 2) the sale and purchasing of technical manuals, etc. 3) the manual section of the U of T Computer Library.

What's a general inquiry?

If you're not sure who to contact or where to start looking for a specialist or Marketing Representative, call Dale at 978-4990. Likewise, if you need a phone number to certain UTCS personnel, or a UTCS service such as Data Entry, she is the best person to contact. Other general inquiries directed to Dale are: prices on manuals, terminal supplies etc., whether UTCS stocks particular manuals, requests to order manuals not stocked by UTCS, and let's not forget complaints and/or compliments about UTCS user services.

Do you wish to buy...?

As far as the sale and purchasing of technical documentation goes, the Information Office stocks material for all systems supported by UTCS, such as Userbook Sections, Reference Cards, and IBM and Digital manuals. In addition, UTCS orders special documentation from a variety of publishers (e.g. BMDP, GLIM, IMSL, Informatics, NAG and SAS). Note, any items or manuals not regularly stocked can be ordered. Dale urges those users purchasing materials from the Information Office to review the contents of items before purchase, because materials are not returnable, nor is the cost refundable. Purchases may be made with cash, by cheque, or through real money customer account or appropriation account numbers.

Or are you just looking...?

The manual section of the U of T Computer Library contains software documentation, subscriptions to computer reports such as, Databook (updated monthly), an extensive collection of IBM reference manuals (see article on IBM manuals for more detail), newsletters from other universities, and programming manuals.

All material in this section of the Computer Library is reference material, and cannot be signed out overnight. The Information Office and the Computer Library do provide a coin-operated photocopier for general use.

These are some of the duties Dale has in the Information Office. Please understand that she is not there to provide all the answers to all the questions, but to assist you in contacting the right person or department on your initial inquiry.

Please feel free to contact Dale Wright at 978-4990, anytime between 9 a.m. - 1 p.m. and 2 p.m. - 5 p.m., Monday to Friday. The Information Office is closed for lunch between 1 and 2 p.m.

Elizabeth Weitmann

IBM Manuals in the U of T Computer Library

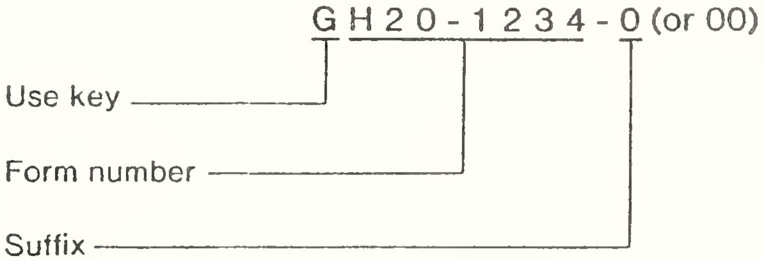
The IBM manual section of the U of T Computer Library has recently been reorganized. This section of the library is now maintained independently from non-IBM publications and the filing method now accords with IBM's suggested procedures. Manual location and library maintenance have both been simplified as a result.

To locate a manual, look up the subject keyword in the keyword-out-of-context index available on the library shelf or at the Information Office desk. Scanning the titles containing your selected keyword should point you to a particular publication most likely to provide the information you need. When an appropriate subject title is identified, make note of the IBM "order number" associated with that publication.

continued...

IBM Manuals continued

IBM "order numbers" consist of three parts — use key, form number, and suffix: for example, GH20-1234-00.



The manuals are now in sequence on the shelves in order of the "form number" portion of their IBM order number. The "use key" is usually either a "G" or an "S" and it can be ignored. The "suffix" indicates the "edition number". The "use key" and the "suffix" have no meaning with respect to the way the manuals are sequenced.

A few minor adjustments have been made to the IBM subscription in an effort to maximize the library's usefulness. Manuals unlikely to be of much use in the reference library, such as installation and planning guides for systems and equipment, should no longer turn up on the library shelves. The subject matter available will also be confined to the IBM hardware and software supported by UTCS for academic users.

We'd like to make this library as useful as possible. Let Information Office staff know if you have any problems with it. If you are unable to locate a manual to serve your needs, try looking it up in IBM's Bibliography (GC20-0001) on the library shelf. If the title you need is in the Bibliography but not available on our shelves, advise the Information Assistant that you think it should be considered for inclusion in the library.

Terry Farley

The Marketing Group: Project Planning

Any major project requires that hundreds of details be looked after. Projects that have computer related components can be even more complex. The marketing group knows that exhaustive planning is an essential element in the smooth flow of any project. UTCS has been involved in the planning of many projects and continues to be an integral part of some of them.

An example is the FAMLI Literature Index. The World Organization of National Colleges, Academies, and Academic Associations of General Practitioners/Family Physicians (WONCA) in co-operation with the National Library of Medicine (NLM), produces the quarterly Family Medicine Literature Index. This Index contains subject and author cross-references pertinent to family medicine. The source material comes from two places: the Index Medicus via the Medical Literature Analysis and Retrieval System (MEDLARS) of NLM, and the Canadian Library of Family Medicine (University of Western Ontario), which is the library service of the College of Family Physicians of Canada. The material from MEDLARS arrives at UTCS in typeset, paginated form, indexed by both subject and author. However, the material prepared by Canadian Library of Family Medicine is not available in Index Medicus. Instead, the text is entered on a DECsystem-10 computer and is sorted and reformatted to conform with the typeset format of the MEDLARS section. UTCS staff worked closely with the FAMLI staff at the beginning of this project to identify the proper typesetting codes.

The material is carefully proofread before it leaves the FAMLI organization. A tape containing the raw text and codes is sent to

continued...

Marketing continued

UTCS DECsystem-10 for processing through a typesetting package. This material is then electronically transmitted to the University of Toronto Press for typesetting and pagination. Galley proofs are returned to FAMLI offices for final verification and minor corrections. Running titles and contents page numbers are added before the final printing. In general it takes two to three weeks from the time material arrives at UTCS before the Index is ready for distribution.

Because typesetting is a labour intensive skilled job, the FAMLI journal saves considerable cost by having text entered by their own clerical staff. This means they have greater control over scheduling. Additionally the very expensive process of proofreading and correcting typeset material is virtually eliminated since the material is prepared and corrected *before* it leaves the FAMLI offices. It also means that the turn around time for each issue can greatly be reduced.

If your are planning a project and computers are an integral part, contact the UTCS marketing group; Bill Fehlner for campus users (978-6509) and Ihor Prociuk (978-6875) for external users.

Ihor Prociuk

Security for User Data and Accounts

From time to time we have published articles concerning issues of security on our computer systems. While UTCS at all times endeavours to maintain the confidentiality of all material stored on computers under its control, there are areas where user cooperation is essential in maintaining security.

This is not to suggest that there is the slightest change of policy from that which has been stated in Userbook and reiterated on numerous occasions. For the sake of confirmation, this policy clearly states that UTCS will investigate any claims where users feel that their accounts may have been used without authorization or that they may have suffered other damage. Note, however, that no compensation will be provided to users unless there is clear evidence that the cause of the misuse originated with UTCS' carelessness or improper actions.

There are a number of actions which users can take in order to protect themselves as much as possible from unauthorized use of their data or of their accounts. While articles in following issues of *COMPUTER-NEWS* will specify in detail how appropriate tools are implemented on each of our regular production systems, the purpose of this article is to draw to your attention a number of general concerns.

1. The most common unauthorized use of an account occurs when the password falls into unauthorized hands. While most people recognize that looking after their account and its password with care is a prudent action, there are users on the computer systems whose passwords are the same as their names, e.g a user with an account name of "John" will have assigned the password "John". Regrettably, there have been a number of recent incidents where such simple passwords have led to grief for the unsuspecting user. Please make sure that your password is a combination of letters to which only you are likely to have any association.
2. It is necessary to change passwords regularly. After a while it is quite conceivible that your password will have inadvertedly slipped out or that you may have lent it to somebody. Do not assume that everyone is honest; assume that everyone is a crook. Change your password on a regular basis.

continued...

Security continued

3. If you have multiple accounts, i.e. one on each of three or four machines, make sure that you use a different password on each of these machines. Thus, in the event that any one of your accounts is broken, that same password will not be the key to a number of other valuable resources.
4. Assume that unless you take explicit actions to the contrary, the material which you are saving on the computer is probably readable by other users. The extent to which this statement is true varies from system to system, but it is the only reasonable starting point when planning for data security. In particular, passwords should not be stored online.

Data security is not confined to protection from unauthorized use. On-line data also requires protection from accidental loss caused either by the owner or by UTCS. (Such loss could result from a user deleting the wrong files or from UTCS system malfunction.) UTCS safeguards on-line data by copying it onto tapes (known as "backups") on a regular basis. It is UTCS policy that certain tapes are kept for one week, others for one month, and other for up to one year before they are recycled (rotated).

Despite this backup policy, it is strongly suggested that users should protect their important data by keeping their own backup tapes. Utilities exist on all of our systems whereby material can be copied from disk to tape and these tapes can then be stored by the owners. This additional protection would save countless hours of work from being lost in an unforeseeable event as disastrous as the Sandford Fleming fire five years ago. More immediate benefits of user backup tapes include lower on-line storage costs, storage for little-used material, and easy transportability of tapes.

Familiarity with ways to enchance the security of on-line data can save time, money, and anxiety for the user. In a series of articles beginning in the next issue of *COMPUTERNEWS*, the procedures for data protection on each system will be discussed in detail.

In the event that any further guidance is required with respect to suitable protection of your material please do not hesitate to get in touch with one of the marketing representative, either Bill Fehlner or Ihor Prociuk at 978-6509 or 978-6875 respectively.

If you suspect a security violation is in progress or has occurred, contact Dr. Frank Spitzer, either directly at 978-4619 or through the IBM Academic Console at 978-7393.

Dr. Frank Spitzer

UTCS Users' Committee

At the November meeting of the UTCS Users' Committee, the proposed charges for special forms were discussed extensively. This resulted, after some debate, in the passing of two resolutions which were forwarded to Vice-President Nowlan. These called for the University Administration to recognize that changes of this kind, in the middle of a year, are not well received by users. In addition, the absence of adequate controls, to prevent SAC users from spending the CAN holder's real money without authorization, very much disturbed some members of the committee.

Other issues which were raised, though not fully discussed, included the proposed charges for DATAPAC services which will be transferred to users, the degradation in service as perceived by research users, and some concern regarding size limitations on Class A jobs. Turn around time for jobs which slightly exceed 500K (the current Class A limit) has increased significantly due to an increase in times of unattended service. These items will be fully discussed

continued...

User' **Committee** continued

at the upcoming meeting to be held on December 6, 1982.

Dr. Frank Spitzer

Committees on Computing at the University of Toronto

The number of University committees related to computing has increased over the past few years. They are a forum for users to express their needs, either directly or through representatives. In addition, some committees control access to specific computing facilities. To assist users in identifying appropriate contacts, this article describes the membership and function of these committees.

The University of Toronto Computing Services Review Group has a mandate to examine the future of computing on the University campus. This committee is chaired by Vice-President Nowlan and has representatives from across the University. People concerned with issues which they would like to bring before this committee should communicate with Professor Nowlan directly. The other members of this committee are Professors J. Buchwald, T. Hull, B. Smith, I. Lancashire, E. Swenson, J. Bossons, K.C. Sevcik, R.N. Wolff, R.W.P. Anderson, Mr. D. Grindal (student representative), Ms. M. Kloosterman (secretary), and assessors A. Heyworth and E. Siciunas from UTCS. With the exception of the UTCS assessors, this is also the membership of the Search Committee for the Director of UTCS.

The Presidential Advisory Committee on Computing Facilities and Services (PACCFS) is chaired by Professor John Bossons. This committee has not met in recent months owing to the establishment of the UTCS Review Group. It provided a forum for senior university administration with respect to computing, and it acted in an advisory capacity to Professor Nowlan.

The UTCS Users' Committee, which meets on the first Monday of each month, endeavours to represent the interests of UTCS users throughout the University. In order to do this, it consists of a representative appointed by the Chairman of every department which has a computing budget. In addition to this there are extra members appointed by Principals, Deans and Directors to ensure that all academic divisions not otherwise represented on the committee are also represented. The University administration is represented through the Co-ordinator of University Information Systems. The Director of UTCS is an ex-officio member and the University Computing Services Faculty Liaison Officer acts as secretary to ensure the dissemination of information throughout the University. The current chairman of this committee is Professor John Hurd, of Trinity College, who has held the position for the past two and one half years. The term of office is normally two years, but owing to the existance of numerous other committees in the hierarchy of computing at the University, Professor Nowlan asked Professor Hurd to continue in office until the Review Group issues its final report expected at the end of this year.

The Committee on Instructional Computing for Undergraduate Instruction meets as is required under the chairmanship of Professor Barry Smith of Zoology. This committee was instrumental in supervising the implementation and many of the design concepts associated first with LIBRA and more recently with the BICS systems. The committee has a mandate to allocate the resources and determine the direction of the BICS facility. Members of this committee include Professors J.B. Smith, J.N. Clarke, R.A. Collins, W.H. Enwright, L. Fertuck, G.S. Graham, R.C. Holt, E. Swenson (ex officio), Mr. T. Wood (UTCS representative), Mr. D. Propp (student representative), and Professor M. Molle and Mr. W. Lauriston as Technical Consultants.

continued...

Committees continued

The LIBRA Steering Committee is chaired by Professor Scott Graham of Computer Sciences. This committee is responsible for setting policy for the LIBRA systems located at Erindale College and Scarborough College. Other members of this committee include Professors W. Enwright and E. Swenson and Mr. N. Housley from UTCS.

There is a committee for **Computing Disciplines Teaching** VAXs known as Computing Disciplines Facilities Steering Committee (CDF). This committee meets from time to time as required, and is responsible primarily for the allocation and running of the two UNIX based teaching VAXs located in the Engineering Annex. This committee, under the chairmanship of Professor Hehner of the Department of Computer Science has, as additional members, Professors C. Bolton, T. Fournier, and E. Swenson (ex officio), Mr. A. Rosselet (student representative), technical consultants in the form of Professor R.C. Holt and Mr. N. Housley, and a UTCS representative, Dr. F. Spitzer. This is the second year that this committee has been operational.

In addition to those committees already described, there are a number of ad hoc committees investigating certain aspects of computer applications, for example, student records security considerations.

Anyone requiring additional information with respect to membership or representation on any of the above mentioned committees is encouraged to contact Frank Spitzer at 978-4619.

Dr. Frank Spitzer

Christmas and New Years Hours of Service

UNIVERSITY OF TORONTO COMPUTING SERVICES
CHRISTMAS & NEW YEARS HOURS OF SERVICE

	24	25	26	27	28	29	30	31	1	2	3
	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Sun.	Mon.
LIBRA Facility	X	X	X	X	X	X	X	X	X	X	N
BICS Facility	X	X	X	X	X	X	X	X	X	X	N
Academic 3033 Facilities	N/UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	N
DEC Facilities	N/UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	N
CSS Facilities	OO	K	K	K	K	K	K	K	K	K	OO

Users of UTCS terminal sites should watch for appropriate signs for the site hours.

*On Friday, December 24, all services/facilities will be available to 17:00; unattended operation will be in effect after 17:00.

KEY

Academic 3033 - APL, ATMS, GPJS, HSJS, TSO, WYLBUR
CSS - Communications and Small Systems
DEC - DEC1090, PDP 11/70

X Closed

UO Unattended Operation: No operator available; on the Academic 3033 computer, all services except GPJS Classes B, C, and E are available.

N Normal Hours of Service

OO Open during office hours; key access at other times.

K Communications & Small Systems facilites will be open to Keyholders as usual.

Users should note that this is a tentative schedule and may be altered via HOTNEWS and alert notices closer to the Christmas period.

Changes to PACX Sign-On Procedure

The Private Automatic Computer Exchange (PACX) will soon be upgraded to Revision D2. When the enhancements outlined in the October/November issue of *COMPUTERNEWS* are available, the procedure for sign-on through the PACX will differ only slightly from its present form. Users will be notified via HOTNEWS and on-line messages when the revisions come into effect.

PACX Sign-on Procedure

This procedure outlines the steps for sign-on through the PACX (Private Automatic Computer Exchange). It includes a service class chart for determining the correct class designation, both numeric and alphanumeric and it also includes a list of the types of connections which can be made through the PACX along with individual instructions on how to connect. Recovery and HELP information are also included.

Service	Classes (up to 1200 baud)		Classes (4800 baud)	
Name	Numeric	Alphanumeric	Numeric	Alphanumeric
ATMS	30	IBMA	32	IBMAF
APL	30	IBMA	32	IBMAF
DEC-10	10	DEC10	12	DEC10F
HELP	--	HELP	--	HELP
LIBRA	63	LIBRA	63	LIBRA
TSO	30	IBMA	32	IBMAF
UNIX 11/70*	70	DEC70	70	DEC70
WYLBUR	30	IBMA	32	IBMAF
3270 emulation**	--	--	132	IBMAFS

* UNIX 11/70 uses the BREAK feature for line speed matching. When using this class, hit the BREAK key until the login message appears on the screen.

**This service is only available at 4800 baud.

Sign-on Instructions:

PART A: Requesting Service from the PACX

1. Turn on the terminal and modem.
2. Request service from PACX as determined by the type of connection:

Dial-up Terminals

For campus 300 baud access, dial 6200. For off campus 300 baud access, dial 978-6201. For all 1200 baud access (Bell 212A compatible), dial 978-3959.

After carrier has been received (high pitched sound over phone) put the telephone receiver in the acoustic coupler holder. Make sure that it is placed as indicated on the modem. Go to **Part B.**

continued...

PACX Sign-On continued

Gandalf LDS 120/125 modems

The Gandalf LDS 120 and 125 modems are powered up when the 'POWER' and 'DCD' lights (on the 120) or the 'READY' light (on the 125) come on. When the modems are powered up, go to **Part B.** If the 'DISC' light on the 125 comes on, turn the modem power off and then on again, and wait until the correct light comes on. Then proceed to **Part B.**

Other Connections

(Please consult notice in terminal area to determine which procedure should be used.)

EIA RS-232 connection:
The Data Terminal Ready signal must be dropped and then raised to gain the attention of the PACX. (For XT100 and VT100 terminals, depress the BREAK key while holding down the SHIFT key.) If this fails, turn off the terminal and then power it back on. Proceed to **Part B.**

20 ma. Current Loop:
A special signal referred to as a "long space" is required to request service from PACX. (Holding down the BREAK key in excess of two-tenths of a second will generate, in some cases, a long space. Please note that some terminals only generate short spaces.) If you fail to alert the PACX, power off the terminal and then power on again. When you have made a connection, go to **Part B.**

PART B: Making the Connection

1. Enter a Carriage Return.

   PACX should respond with 'enter class'. If there is no response, go back to **Part A** and repeat the steps. If there is still no response, then call the Console Operator. See the HELP section in this document for the correct telephone numbers.

2. Enter the desired numeric or alphanumeric class.

   See the Service Chart for the correct class codes. Make sure that the class speed matches your terminal speed. Make sure that the terminal and modem have the proper duplex setting.

3. Enter a carriage return.

When PACX responds with the message "class xxxxxx start" you are being connected to the service you selected. You will be prompted for further required information such as your terminal type, account number, and password.

continued...

PACX Sign-On continued

If the system response is other than the above, check the chart below for further instructions.

PACX Response	Action
a) none	Go back to **Part A.** If, after several attempts, you are unable to connect, telephone the Console Operator for the system requested.
b) no response after: class xxxxxx start	Be sure your terminal is set to the correct speed for the class selected. There may be system problems. Telephone the Console Operator for the system requested.
c) bye	You did not respond within twenty seconds or you attempted to connect three times without success. Go back to **Part A** and try again.
d) invalid response enter class	The numeric or alphanumeric class code you entered was incorrect. Check the Service Class Chart and try again.
e) class xxxxxx unavailable enter class	The class you requested is temporarily out of service. Select another class if possible.
f) class xxxxxx unassigned enter class	You have entered an incorrect class code. Check the Service Class Chart and try again.
g) class xxxxxx restricted enter class	Access to this class is restricted at this terminal. Select another class if possible. Note: Access codes on some systems may be set to prohibit access through PACX. If this is the case, you must access the system at the designated site.
h) class xxxxxx busy queue size nn do you wish to queue	All ports of class XXXXXX are busy, and you are about to be queued at position NN. Respond with: Y to queue or N to select another class or Q to quit, then press 'return'. You will receive periodic updates of your position in the queue.

continued...

PACX Sign-On continued

NOTES:

The PACX is unavailable every Wednesday morning between 06:00 and 08:00. This is reserved preventative maintenance time and if you try to sign on you will receive a message that the PACX is unavailable. If you do succeed in making the desired connection, you do so at your own risk.

Gandalf LDS 120 users should make sure that they TURN OFF their TERMINAL and/or MODEM when NOT IN USE. This will improve 'enter class' response time.

HELP

A special alphanumeric class has been set up in order that you may receive help when signing on through the PACX. By requesting class HELP you can obtain instructions on how to access the PACX help file.

When you enter class HELP, this message will appear:

```
USE CLASS 10 (12 FOR 4800)
THEN TYPE: HELP PX
POWER OFF/ON NOW TO REENTER CLASS
```

After getting a new 'enter class' message and entering 10 or 12, you will be connected to the DEC-10. HELP PX will display a Help file showing available classes, plus this list of options to proceed:

1. sign on to DEC-10 via LOGIN,
2. power off, and then on, to reenter a new class,
3. type HELP PACX to get full PACX information. Use CONTROL-S to stop scroll or CONTROL-Q to start scroll.

HELP PACX will be the primary Help file for PACX across all systems.

Important Telephone Numbers:

DEC-10 Console Operator	978-4318
IBM Console Operator	978-7393
Advising	978-HELP

Ron Vander Kraats
Patricia Shore

Rates for Special Forms Paper

The current rates for paper consumption at a UTCS special forms printer are given below. The first column gives the last two digits of the forms code and the third column is the cost per page. This information is a supplement to the Special Forms article in the October/ November *COMPUTERNEWS*. These rates take into account cost increases through January, 1983. They will remain in effect until the next major cost increase from suppliers.

FORMS CODE (last 2 digits)	DESCRIPTION	PRICE/ PAGE
00	11 X 15 1 Pt Lined	$.010
01	11 X 14 1 Pt Blank	$.010
02	11 X 15 2 Pt	$.026
03	11 X 15 3 Pt	$.039
04	11 X 15 4 Pt	$.056
05	1 7/16 X 4 Labels (xl)	$.006
06	15/16 X 3 1/2 Labels (x3)	$.011
07	1 7/16 X 4 Labels (x3)	$.017
08,09	11 X 8 1/2 1 Pt Lined	$.007
10,11	11 X 8 1/2 2 Pt	$.017
12	11 X 8 1/2 3 Pt	$.024
14	11 X 8 1/2 4 Pt	$.036
16-18	11 X 9 1/2 1 Pt Blank	$.011
20-23	11 X 9 1/2 1 Pt Blank	$.011
30,31	8 1/2 X 15 1 Pt	N/A
32	8 1/2 X 15 2 Pt	$.021
33	8 1/2 X 15 3 Pt	$.032
34	8 1/2 X 15 4 Pt	$.045
35	8 1/2 X 15 1 Pt Blank	$.008

Note that forms codes 30 and 31 request standard paper. In this case the page rate is zero, although the special forms mount charge is still accessed.

Bill Fehlner

SAS/GRAPH: New Options in 79.6

Some new procedures and options are available in SAS/GRAPH 79.6. These are features of the version of SAS currently available at UTCS, and will also be available in SAS82, unless otherwise noted.

PROC G3GRID

Both the G3D and GCONTOUR procedures require a rectangular grid of data points. If your data does not meet this requirement, an error message will be printed and no graph will be produced. To assist users with this problem, a new procedure called G3GRID is now available. PROC G3GRID will interpolate a function of two variables onto a rectangular grid, given a set of values for the function and the variables.

The default method of interpolation is a version of bivariate interpolation. The method consists of first dividing the plane into non-overlapping triangles using the positions of the available points, and then fitting a bivariate fifth degree polynomial within each triangle. The interpolated values are given by evaluating the polynomial for each grid point that falls in the triangle. This method works best for fairly smooth functions with values given at uniformly distributed points in the plane. An alternative method is available which produces an interpolation that is optimally smooth. The surface generated may be thought of as the one that would be formed if a stiff thin metal plate were forced through the given data points.

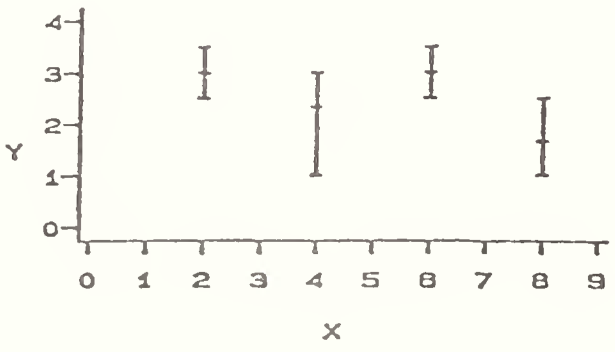
A GRID statement must accompany the PROC G3GRID statement. The syntax of this statement is:

```
GRID var1*var2=var3 ... / options;
```

where var1 and var2 are variables containing the available points, and var3 is the name of the variable containing the function values. Options can be specified to request different interpolations, the number of neighbours to use in derivative estimates, and the size of the interpolated grid.

New Options for the SYMBOL Statement

Two new interpolation routines have been added to the SYMBOL statement in SAS/GRAPH 79.6. I=HILOxxx can be used as an option when multiple Y's occur for each level of X. When I=HILO is specified, the minimum and maximum Y values at each X level are connected by a solid line and the mean Y value is marked with a tick. HILOT adds tops and bottoms to each line, HILOB produces bars instead of lines, and HILOC can be used with stock market data so that a tick appears at the close value. Other variations are possible. You can use I=STDkxxx when multiple Y's occur for each level of X and you want to join the mean Y value with +/- 1, 2, or 3 standard deviations for each X. In the general form, k is 1, 2 or 3 standard deviations and the xxx values are P (pooled variance), J (join), T (tops & bottoms), B (bars), and M (standard error of the mean). B and T should not be used together, but other combinations of M, P, J, and B or T are possible.



This is an example of I=HILOT

New Options For The PIE Statement

Two new options have been added to the

continued...

SAS/GRAPH continued

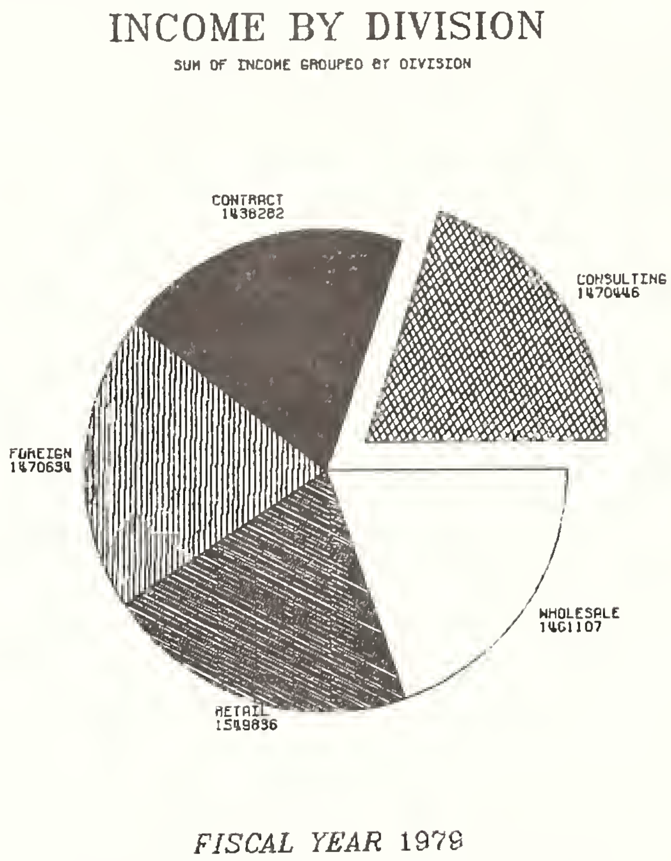
PIE statement. Use the OTHER= option to specify the size of slices assigned to the other group. By default, any slice that is less than 4% of the circle will be put into the OTHER category. The values supplied in EXPLODE=list define which slices will be exploded. For numeric variables, the list gives midpoints to identify the slices and for character variables, the list specifies the character levels. When EXPLODE= is specified, the radii of the PIE slices are reduced by 20% to allow room for exploding slices.

Special Patterns for PIE Slices

There are three pattern specifications that can be used to fill PIE slices: Pntaaa, PEMPTY, and PSOLID. Pntaaa is used to specify density of shading (n), single or crosshatched lines (t), and the angle of the lines (aaa). You can specify PEMPTY to request empty slices and PSOLID for solid fill slices. The FILL= option is still supported and if used will determine slice patterns. FILL= will not be supported in the next release of SAS/GRAPH.

Further Details

More information about the features mentioned above and other new options in SAS/GRAPH 79.6 can be found in the SAS Institute Technical Report P-119, available in the Information Office.



This is an example of an Exploded Pie Slice with Special Patterns.

[Exploded Pie Slice with Special Patterns was produced on the UTCS Gould Plotter by Diane Mitchell.]

Diane Mitchell

SAS PROC CALENDAR: New for SAS82

The October/November issue highlighted many new procedures of SAS which will be available when SAS82 is installed here at UTCS. This month we would like to highlight the new CALENDAR procedure.

The CALENDAR procedure is another procedure which will be available for the first time in SAS82. PROC CALENDAR produces either of two calendar formats: summary or schedule. A summary calendar provides information about the same variables over time. For example, a summary calendar could display the number of telephone calls received daily by the Central Advising Office. In a summary calendar, each day is represented by one observation, and each kind of information is a variable. Each piece of information for a given day is the value of a variable for that day. A schedule calendar, on the other hand, displays the duration of an event by a continuous line through each day for the event. In a schedule calendar, each event is one observation, and a single day can display several events (observations) on successive lines. One event (observation) can also appear in several days, weeks, or months.

An ID statement is required with PROC CALENDAR to specify the SAS date variable to be used as the date of each observa-

continued...

SAS continued

tion. The input data set must be sorted by this variable. For a summary calendar, there should be only one observation per day. For a schedule calendar, several observations may have the same ID value.

Several statements and options are available for enhancing your calendar output. The WEEKDAYS options specifies that CALENDAR should display and use in calculations only weekdays. The HEADER= option determines the type of heading to use in formatting the month name. The SUM and MEAN statements can be used with summary calendars to specify variables that are to be used for the appropriate calculations for the month.

Since PROC CALENDAR tries to fit the calendar within a single page, the page dimensions determine the number of variables and observations that may be displayed. Therefore the values of the system options PAGESIZE= and LINESIZE= should be picked carefully.

More complete documentation and examples of PROC CALENDAR can be found in the new SAS User's Guide: Basics. Please watch HOTNEWS, SAS NEWS, and *COMPUTERNEWS* for current information on the availablity of SAS82 and PROC CALENDAR.

Diane Mitchell

Plans for DEC-10 Graphics Output Enhancement

Planning is underway to make the Calcomp 1051, now connected to the IBM3033A, also available to DEC-10 users as a color graphics hard copy device. It will be supported via the graphics software, KIG PLOTBASIC version 2.8, which is under development, and will soon be available for user testing.

The current graphics software on the DEC-10, KIG PLOTBASIC V1.0, only supports HP2648A, Xerox Diablo 1620, and DEC VT52 terminals, under the old Fortran 10-V5A. KIG PLOTBASIC V2.8 will run under the current Fortran 10-V6 and will support DEC VT52, 2VT125, Xerox Diablo 1620 and 1641, Tektronix 4013 and 4014, Hewlett-Packard 2648A and GIGI terminals, as well as the Hewlett-Packard 7470 and Calcomp 1051 plotters.

The Hewlett-Packard 7470 (a small two pen, table-top plotter) the GIGI (a seven colour graphics terminal) and the Calcomp 1051 (a large four pen drum plotter) will start off our colour graphics support in KIG on the DEC-10.

Users will be able to run their graphics Fortran programs interactively on DEC-10 with or without a graphics terminal. The KIG Graphics file (KGF) produced by KIG is machine independent and may be transfered to the IBM for a Calcomp 1051 colour hard copy output by using either IPRINT or CALXFR. These two commands are designed so that users need not know anything about the IBM except to have a valid account number SAC (System Access Code) on the IBM for plot charging purposes. For those users who use both DEC-10 and IBM3033A, the KIG PLOTBASIC V2.8 will be available on both machines. Thus users' graphics Fortran programs will be transferable between the two machines provided that the users follow the ANSI Fortran standard.

The user test period for the new KIG PLOTBASIC V2.8 and Calcomp support on DEC-10 will be announced in *COMPUTERNEWS* and LOGIN messages. For further information on the Calcomp 1051, please refer to Userbook 3.8 PLOTBASIC. If you have any questions please contact Kin Fong at 978-4924.

Kin Fong

Global Editing using SOS on the DEC-10

There are many circumstances in editing when a global command can be a real time saver. Often a text file produced by a utility program must be cleaned up, perhaps by removing excess blank lines. Another example is modifying a data file where columns may have to be shifted to the right in every record. Most users of the SOS editor on the DEC-10 are familiar with simple global commands. For example, the substitute command can be applied over a connected range of lines in the following manner: *sold$new$100:700. An apparently little known feature of SOS permits the easy construction of sophisticated global commands.

The **&** command allows the repeated execution of a number of SOS line or alter mode commands. This permits one to edit a large segment of a file with only selected lines being processed. Its use is best described with an example. Just recently, I was trying to make a nice looking list out of a file that had a large number of blank lines in it. The following **&** command sequence will go through a file and delete all blank lines. Note that the * is the SOS prompt and that after entering the **&** and the delimiter (% in this example) SOS prompts with &*.

```
*b
*&%
&*f^E^X^E^X$
&*d.
&*%
```

Now in english, this reads as follows:

The **b** positions the line pointer at the beginning of the file.

The **&%** means you are going to use the **&** facility with % as the delimiter.

&* indicates you are in the middle of entering the commands that will be repeated.

f^E^X^E^X$** is a way to find empty lines in the file. The combination ^E^X simply says to match nothing. The complete command finds nothing followed by nothing, a synonym for an empty line. The **$ is the Escape character which always terminates the search string in a find command. The end of the commands is signaled by the next occurrance of the delimiter, % in this example. If the user wishes to abort the facility before typing the delimiter, typing two ^G (Control-g) characters will do this. (Note, this also aborts the S* and F* modes that users sometimes find themselves in by accident when they forget to terminate a search string with an escape character!)

d. means delete the current line.

% is the second occurrence of the delimiter, at this point the commands will begin execution. Note that the commands begin from where the current line pointer is. Thus the line pointer in this example is positioned to the beginning of the file so that all blank lines in the file are removed.

A second example uses the **&** command to insert blanks between fields in a data file. The following command sequence takes advantage of alter mode to locate specific columns in each record. In this example, sample data contains three five-column fields in each record and these fields are to be separated by single blanks.

```
*^
*&%
&*a.
&*5b̸ib̸$5b̸ib̸$n
&*%
*<CR>
```

In this set of commands, **b̸** represents a blank and <CR> represents a carriage return.

^ initiates processing by moving pointer to the first line of the file.

The **&%** means you are going to use the **&**

continued...

Global Editing continued

facility with % as the delimiter.

The **a.** sets alter mode for the current line.

The string of five alter mode commands, **5b̸ib̸$5b̸ib̸$n** actually modifies the record. **5b̸** moves the cursor over five columns and **ib̸$** inserts a blank at the position of the cursor. Note that **$** represents the escape character. The movement and insertion are repeated as often as necessary. Finally, the **n** command completes the current line and begins alter mode for the next line.

Note that the & facility terminates in this example when there is no 'next line' to be altered.

A little experimentation should make you comfortable in using this facility. A note of help on this command can be obtained by typing the H,& command when in SOS. Remember that the commands stop executing when the search fails. Thus this facility is only suited to applications that result in some sort of search failure or no more lines failure in order to avoid an infinite loop.

Try it sometime.

Terry Jones

Xerox 9700 Printing Service

In May of 1981, UTCS initiated an experimental Xerox 9700 printing service. In conjunction with U of T's Library Automation Systems (UTLAS), UTCS made arrangements whereby users could conveniently produce output on the Xerox 9700 Laser Printing system. Since then, many users have produced output on the Xerox 9700, and most have found it to be an easy way to get high quality printed output at relatively low cost.

UTCS is now moving towards offering Xerox 9700 printing as a fully-supported service. Initially this means that a new USERBOOK section will be produced outlining how to use the Xerox 9700 service, and providing samples of the various typestyles available from the service. In addition, UTCS is in the process of automating the accounting system so that the accounting process can be made easier both for us and for our users. Both of these enhancements are planned for early in 1983.

In the future Xerox 9700 users can expect to see further enhancements to this service. Improvements being considered include special fonts for italics or bold characters, and better access to the Xerox 9700 from WYLBUR and the UNIX 11/70 system. Other enhancements which would permit offering a pseudo typesetting service on the Xerox 9700 may be considered.

In conjunction with the automated Xerox 9700 accounting system, a new rate structure will be put in place. This new rate structure will require that paper costs accrued from Xerox 9700 printer jobs will be charged against real money appropriation account numbers (see the article "Special Forms" in the last issue of *COMPUTERNEWS).*

The new charging rate for Xerox 9700 output is as follows:

Job Setup Charge: $5.00 (per print job)
Page Charge: $0.06 (per page of output)

Note that this new charge will appear in the monthly CAN billing report, but will not actually be charged to the user's CAN. All users will have to pay this charge in unsubsidised funds. There will be no line count charge, and no charge of any kind against the user's CAN or SAC.

For details of when the new Xerox 9700 USERBOOK section will be available, and when automated Xerox 9700 accounting

continued...

Xerox 9700 continued

will go into effect, please watch HOTNEWS and *COMPUTERNEWS.*

John Bradley

Communications and Field Services (CFS) News

In recognition of the importance of communications, UTCS has consolidated the Communications Group. In fact, there are now two groups — Communications Systems Planning and Development, headed by Ron Vander Kraats, and Communications Software Planning and Development, headed by Tom Milligan. The former group is responsible for the communications network facilities, including the PACX unit, while the latter group will look after the network software (e.g. DECnet, HASP/JES remote job entry).

We feel that this consolidated effort will enable us better to serve the needs of the university computing community. Please call Ron Vander Kraats at 978-4624 or Tom Milligan at 978-7063 for information on what the Communications Group does and how we can help you better communicate with your computer or ours.

The CFS Micro Services (now part of Communications Systems Planning and Development) continues to expand its abilities. While we have no new equipment, we have several new communications abilities — ways to transfer data from one micro to another. This is part of our effort to provide a comprehensive file transfer program among a range of mini- and micro- computers. Please contact Ian Darwin at 978-6134 or Grant Davis at 978-5071 to discuss your file transfer requests.

Software Development is an ongoing activity at CFS. We are currently reorganizing our support service to be able to provide maintenance of small computers all over campus. We are organized so as to be able to support RT-11, RSX-11M and UNIX-based systems. Whatever your needs for small system support, we'd like to offer our help. To discuss your needs, please contact Ia Darwin at 978-6134.

In addition to the 'PED' full-screen editor, we have available a UNIX-like line editor for RT-11. PED is available for departmental UNIX sites, and will run on 11/23's and larger machines. The RT-11 line editor is available for any RT-11 site on campus. Contact Mario Ruggiero at 978-4597 for details.

The Field Service group can provide maintenance on the hardware in your small computer. We currently maintain LSI-11 systems, PDP-11 computers, VAX-11 configurations, printers and other peripherals as well the PACX unit and of the communications and keyboard terminals on campus. To see how we can service your computer hardware, please call Kam Mark at 978-5050.

Our Hardware Develpment group has been busy putting together new systems and selling off surplus equipment. In conjuction with Software Service, we plan and configure small- and medium- scale computing facilities for groups on all three campuses. Luke Sulatycki, our Hardware Services Supervisor, may be reached at 978-4693.

CFS covers the whole range of communications and small systems needs and services. If you are considering the acquisition of a small computer, why not call us first? That's what we're here for.

Ian Darwin

Recently Updated Documentation

The following sections of USERBOOK have been updated in their entirety as of August 1982.

USERBOOK 3.3Debug
USERBOOK 3.3Diskdm
USERBOOK 3.3Tapes
USERBOOK 3.3Wylbur
USERBOOK 3.7Subutils

These may be purchased at the Information Office, Engineering Annex, Room 206.

USERBOOK Section 3.8Plotbasic has been partially revised as of November 1982. The eight page update to this section is available in the Information Office free of charge.

Updates of the HSJS and GPJS Reference Cards may be purchased in the Information Office. These updates were issued in September 1982.

Other manuals which have been recently updated and which are available in the Information Office are:

SAS User's Guide: Basics
SAS User's Guide: Statistics
BMDP User Digest

Full details about purchasing manuals can be obtained by contacting the Information Office at 978-4990.

Elizabeth Weitmann

New MARK IV Release

On November 15, 1982, Release 9 of MARK IV was made the default for all MARK IV catalogue procedures. Users who wish to use the old Release 8 should add the BASELIB and PARMLIB parameters to the EXEC card as shown in the following example:

```
// EXEC M4R,DSN='A.USR.M4.LIB',
// BASELIB='APPL.MARKIV.RL8.BASELIB',
// PARMLIB='APPL.MARKIV.RL8.PARMLIB'
```

Support for Release 8 will be dropped in mid-January 1983. For Release 9, two new catalogue procedures named M4Q and M4F have been added: M4Q is for use in processing MARK IV QUERY LANGUAGE COMMANDS; M4F is for use in processing MARK IV FREEFORM INPUT. The FREEFORM REPORTING capability has more stringent syntax checking in Release 9 than in Release 8. For more details, please refer to Section #2.2.1.10 (PG.2-5) in the Technical Information Bulletin available in the Information Office.

Patricia Shore

Letters to the Editor

Dear Editor:

I wish to take this opportunity to offer comments on three articles and a regular feature that appeared in the October/November 1982 issue of *COMPUTERNEWS.*

The first comment refers to the article on page 1 on BICS by Bob Keith. It would be helpful to tell the reader whether the BICS service is available to him and if so, how to go about learning more about how to use the service and how to obtain an account. It would also be informative to indicate who are using the accounts now and to identify the Steering Committee that is overseeing the service. The present article leaves a lot unsaid.

My second comment refers to the article on page 8 by Frank Spitzer on the UTCS Users' Committee. I am glad to see this feature and hope that you intend it to appear regularly. I would like to suggest that occasionally, you may wish to list the members of that Committee. I know there are a lot of names. However, having lost the CSR's, these departmental representatives are the next best thing for a user. Think of them as your adjunct CSR's. And by the way, the official name of this committee is the UTCS Users' Committee.

My third comment refers to the article on page 10 by Ian Darwin on CSS seminars. I think this is a good idea and I would like to suggest that an advertisement in the Bulletin may even be warranted, one similar to the U of T Press ads. There are a lot of people out there who wouldn't touch UTCS services but may be enticed by a seminar on micros.

Finally, a comment on a regular feature - your listing of UTCS Systems on the back page. This information would be of interest if one were issuing a prospectus to a would-be stockholder. However, to a prospective user of computer services a listing of access points giving room locations, times of opening, number and types of terminals, number and speed of printers, etc. would be more relevant. Only the blurb on CSS in this section would pass my test for relevance.

Keep up the good work.

E. V. Swenson
Co-ordinator, University Information Systems

Computing News In Brief

Leibniz Concordance Under Way

Four U of T researchers have been granted $117,000 by the Social Sciences & Humanities Research Council of Canada for work on a concordance of the writings of G.W. Leibniz. Leibniz, whose philosophy is seeing a twentieth century revival, is known for his invention of the calculus, and is recognised as a father of computer science. It is fitting that the concordance of his work will be compiled with the help of the computer facilities here at the University of Toronto Computing Services. "We've been very impressed with their efficiency and helpfulness," said Professor Graeme Hunter, one of three University of Toronto professors working on the concordance. He will be assisted by Professors Robert McRae and William Seager of U of T, and Professor Richard Finster of the University of Trier in West Germany.

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News continued

IMS Obtains Genigraphics System

The Faculty of Medicine's Instructional Media Service has acquired a Genigraphics system to help produce the more than 10,000 diagrams it outputs each year. The $200,000 system is only the second of its kind in Canada, and for IMS it is "paying dividends after only two months in service". IMS is a non-profit service which provides "health-oriented educational and medical teaching materials for the University at large, the hospitals, non-profit organizations, government, and the lay-public".

We thank the University of Toronto "Bulletin", Number 6, October 25, 1982 for the information for these two articles.

Reflective Glare from Display Terminals

Ergonomically designed office equipment is much in the news these days, especially when the effects of Display Terminals are discussed. Radiation questions aside, most terminal users agree that screen glare is the most common and, perhaps, the most annoying problem in terminal work.

David Bull, of Student Record Services, has the following to say about the situation:

"Reflective glare is most commonly caused by bright overhead lighting or positioning the terminal near a large unshaded window. Prolonged use of a terminal situated in these conditions can lead to eye fatigue. To avoid reflective glare, some operators subconsciously adjust their seating position. This can lead to postural discomfort.

"One way to prevent reflective glare is to situate terminals away from direct overhead lighting and unshaded windows. When this is not possible, a light absorbing filter can be fixed directly onto the face of the screen. These filters are constructed of a durable nylon mesh and are sized to fit all models of Northern Telecom, Olivetti, and Micom display terminals. The cost is approximately $40.00 per filter."

Information for this article has been adapted from the Student Record Services Newsletter #16, October 27, 1982.

Computing Newsletters

In addition to its stock of manuals and computer-related material, the Information Office houses over 130 computing newsletters from Canada, the US, England, and Iraq. Most are from universities with systems similar to those at UTCS. If you are interested in seeing how other computer centers work, if you would like to read special interest articles, or if you just want to look up your Alma Mater, the newsletters are available in the Information Office, Engineering Annex, Room 206.

Here are some highlights from University newsletters we have on file.

"Computer Graphics" is the theme of the Spring 1982 issue of "Interface", The Computer Services Magazine from Arizona State University. Articles include an overview of Graphics Software, information on the "Harvard Routines" and a discussion of "Computer Graphics in Geographic Research".

The University of Illinois at Urbana-Champaign newsletter, "Off-Line", offers monthly updates on the work of the FORTRAN Standards Committee X3J3 which is producing the next revision of the FORTRAN standard. Recent issues we've received are August, September, and October 1982.

The October issue of the Rensselaer Polytechnic Institute Newsletter contains an unusual FORTRAN bug isolated by a user.

"/UPDATE", the newsletter from the State University System of Florida, presents a short quiz on Computerese, as well as a graphically interesting article entitled : "What is an Operating System?".

One Final Note

We received a press release recently advertising the "Crossword Scrambler". The highlight of the ad was the following quotation:

continued...

News continued

"CROSSWORD-SCRAMBLER was created by an Apple programmer as an aid in teaching his son and family. Unlike many software products now out on the market, this one lets you USE YOUR BRAIN. If you like being human and desire to 'INTERFACE' with computers rather than be 'SUBJECTED' to them, this is what you've been waiting for."

While we conceded we liked being human, we were not exactly certain if this is what we've been waiting for.

Patricia L. Shore

Change Committee

The Management of UTCS has recently clarified the role of the Change Committee. I would like to take this opportunity to inform staff and users of the guidelines set down by the management group.

The Change Committee's primary function is to monitor the implementation of changes to our systems and services. The Committee ensures that proper notification is given to all groups (users, UTCS staff, UTCS management). Many changes are announced through a broadcast message, or an item in HOTNEWS. It is important for users to read HOTNEWS and broadcast messages to keep informed of changes. Occasionally, signs will be posted at sites. More detail on specific changes can be found in *COMPUTERNEWS* articles, and a summary of all current changes can be found in the regular *COMPUTERNEWS* Change Committee article.

Changes that have an impact on users, or changes affecting UTCS policy must first be given approval by the Management group. After a change is approved by Management it is forwarded to those involved in implementation for discussion at the Change Committee meeting. The Change Committee then checks that all tasks for a change have been considered and continues to monitor the completion of these tasks.

Users and staff are invited to propose changes at any time. Users should forward their changes to either their Marketing Representative, or the Manager of Marketing, Dr. Frank Spitzer.

1. The project to provide the "backslash" character on one of the IBM printtrains is nearing completion. The backslash slug has arrived from the manufacturer and work is now in progress to complete the installation.
2. The conversion to the use of DEST=GOULD for Gould plotter output is scheduled for completion on November 29, 1982. Occasionally, plotter output requiring special forms mounts may be delayed, if the job producing this output was submitted from WYLBUR. In general, users who cannot locate either CALCOMP or GOULD output should call the IBM Academic Console at 978-7393, provide the jobname (e.g. W0123412 from WYLBUR), and inquire whether any plotter output is still queued for that job.

Cecilia Welch

Summary of APL Hotnews Items

The following is a list of HOTNEWS items entered between October 11, 1982 and November 12, 1982.

DATE	TITLE
01/11/82	Charging for the use of special forms effective today.
12/11/82	Clarification of requirements of utility: 1 FILEPRINT.

APL HOTNEWS may be accessed by loading the workspace, 1 HOTNEWS. For example, to print the news of November 28, 1981, type: NEWS '28/11/81'. To print all news items since October 1, 1981, type: NEWS SINCE '01/10/81'. For more instructions on the use of this workspace, please see the variable DESCRIBE.

Mary Ann Lawry

DEC-10 Gripes

SPSS JCL PROCEDURE

Recently, I had occasion to use SPSS, using a procedure file from another installation. It used the typical SPSS file denotations to store and access systems files and data (i.e., FT04F001 etc.) instead of the DD names used at UTCS. However, even though the system did not reject this usage, it could not write data to FT04F001 (it wrote the dictionary only). This was not discovered until repeated attempts to run the data failed. My complaint is that, although I respect the need to simplify things, the old conventions should work perfectly unless otherwise stated on the system. This should be corrected or appropriate notices should be posted for users.

Answer

The SPSS running on the IBM has not been modified and hence uses FT04F001 as documented. UTCS, in order to simplify access to various products, provides a JCL procedure where the system save file can be referred to by ddname OUTFILE. This is fully documented in the UTCS USERBOOK which is recommended reading for all new users. It should be pointed out that FT04F001, however, WILL work correctly even in the UTCS provided procedure.

It sounds as if you had some other problem. Since you say that the "dictionary" was written out, perhaps the dataset you were using as the system output file had insufficient space. I suggest you contact Central Advising at 978-HELP.

DEC to IBM Link

Perhaps like other DEC users, I have typed "q ibm:" at monitor level to see whether or not my iprint request has been processed. When my job appeared in the "Output Queues" table with an asterisk and the note "*Job being output now", I wrongly assumed that, at that moment, my job was being printed. When my job had disappeared from the "Output Queues", I also wrongly assumed that my job was printed. It would be helpful if users were informed by "q ibm:" that its "output" was not on a printer but rather just across the IBM link. I've turned up at the CENTRAL printer expecting a printing job to be done when evidently I had no right to expect it done. Is there any way, other than phoning the

continued...

DEC-10 Gripes continued

line-printer operator, of learning if an iprint submitted from DEC has in fact been printed?

Answer

The DEC 10 command a ibm: indicates the queue status between the DEC and the IBM link. It is not a reflection on job completion for jobs which have been submitted from the DEC, but rather an indication of job transfer to the IBM for processing or execution. It is not possible to determine (from the DEC side) if your iprint (or any job, for that matter) has finished or if it is still waiting to be completed. The only resource you have is to either look at a backlog display terminal or to phone the IBM console. However, for simple iprints, the time for the output to come out is usually not more than a few minutes, depending on priority, system load, and whether or not you are using special forms.

File-Management

Wishing to destroy all files with prefix TST, I attempted to type

```
 DEL TST.*
```

but due to butterfingers typed

```
 DEL TST,*
```

Not a hard mistake to make. There was considerable damage by the time I stopped it. It would be a good idea if such a doomsday command requested confirmation - the benefit would probably outweigh the very occasional annoyance.

Answer

We appreciate your comment regarding wild card delete confirmation. This suggestion has been passed on to the appropriate systems personnel who are considering the matter.

There are some consequences of this change that must be taken into account before anything is actually changed. The first consideration is that the change will affect a number of MIC and batch files already in use which would then require modification. Secondly, we have to consider how many people are in favour of the change and to what level should it be implemented? (i.e. only for anything.* or *.anything or should it include checks for wild letter constructions?)

UTCS recommends that you include an extension on all files other than purely temporary ones so that no important files would be deleted with the type of error you report (since DEL * will delete only files without extensions). If you make a practice of including extensions and carefully check any commands involving wilds card BEFORE hitting the carriage return, you should avoid any further difficulties.

Terry Jones

User Exchange

The Communications and Field Services has for sale a number of LSI-11/23 systems based on the 'VT103'. (The VT103 is a VT100 terminal with an LSI-11/23 microcomputer inside.)

Each system has a VT103, 192KB memory, a four-line serial port, a dual eight inch disk, a 7.5 MB Winchester, and a double-sided, double-density floppy drive. If you are interested in purchasing an LSI-11/23 system, contact Luke Sulatycki at 978-4693 for more details.

Ian Darwin

Errata

The Alphanumeric classes for DEC-10 service given in the Oct/Nov issue of *COMPUTERNEWS* (PACX article) should read as follows:

Numeric Class	Service	Alphanumeric Class
10	DEC-10	DEC10
12	DEC-10	DEC10F

We apologize for the error.

In the October/November article "UTCS Short Courses (Non-Credit)", the name of the instructor for DDS101 - Introduction to IBM Disk Data Sets was inadvertently left out. The instructor for the course is W. Barek and he may be reached at 978-8823.

Please note: If you want to register for a specific Short Course, contact the Education Facility Co-ordinator at 978-4565 for details. She can also provide a brief outline of each course.

The UTCS Users' Committee was referred to as the Computer Users' Committee in previous issues of *COMPUTERNEWS.*

Patricia Shore

Personnel Changes

Congratulations are in order for **Job Dela Cruz,** who has been promoted from Computer Operator 2 to Computer Operator 3, and **Keeny Leung,** who has been promoted from Computer Operator 1 to Computer Operator 2.

Merton Hunte, Jim Bailey, and **Frank Cianfarani** are assuming new responsibilities as Remote Site Co-ordinators. **Frank Pearce** has been appointed as the Remote Site Supervisor.

While **Marilyn Peters** is on maternity leave, **Siew Gin** will be replacing her in Systems.

Elizabeth Weitmann

Recent Acquisitions in the Computer Library

Baranson, Jack.
Technology and the multinationals: corporate strategies in a changing world economy.
Lexington, Mass., D.C. Heath, 1978.

Barr, A. and Feigenbaum, E.A., eds.
The handbook of artificial intelligence.
Los Altos, Cal., William Kaufman, Inc., 1981-82.

Grogono, Peter and Nelson, S.H.
Problem solving and computer programming.
Reading, Mass., Addison-Wesley, 1982.

International Conference on System Dynamics, 6th, University of Paris-Dauphine, Nov. 1980.
System dynamics and the analysis of change, ed. by E. Paulre.
Amsterdam, North-Holland, 1981.

Kernighan, B.W. and Plauger, P.J.
Software tools in Pascal.
Reading, Mass., Addison-Wesley, 1981.

continued...

Library continued

Ledgard, H.F. et al.
PASCAL with style: programming proverbs.
Rochelle Park, N.J., Hayden, 1979.

Moore, John B.
WATFIV: FORTRAN programming with the WATFIV compiler.
Reston, Va., Reston Pub. Co., 1975.

Perlis, A., Sayward, F. and Shaw, M., eds.
Software metrics: an analysis and evaluation.
Cambridge, Mass., MIT Press, 1981.

Wakerley, John F.
Microcomputer architecture and programming.
New York, Wiley, 1981.

Stephanie Johnston

Cumulative Index for 1982

This cumulative index includes all *COMPUTERNEWS* issues in 1982, that is, numbers 196 through 203 inclusive. In the alphabetical sorting of subject headings, uppercase letters precede lowercase letters. For example, APL precedes Accounting. Articles are referenced by title, issue number, and page number and they are listed under subject headings by issue number.

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Bill Fehlner

UTCS Systems

3033/N12 Processor

- located in McLennan Physical Laboratories
- provides General Purpose Job Stream, High Speed Job Stream, TSO, WYLBUR, APL and ATMS services
- 12 megabytes of memory
- MVS with JES2

3033/U16 Processor

- located in McLennan Physical Laboratories
- provides "Glass Keypunch" access to HSJS using BICS
- 16 megabytes of memory
- UTS under VM

4341 Mod II Processor

- located in McLennan Physical Laboratories
- provides administrative IMS/VS, DB/DC, Batch and TSO
- 8 megabytes of memory
- MVS with JES2

DECsystem-10 Model 1090

- located in McLennan Physical Laboratories
- provides General Purpose Time-Sharing
- 512 K - 36 bit words of memory
- TOPS-10 operating system, version 7.01

Communications & Field Services (CFS)

- located in Sandford Fleming Building, Fourth Floor
- DEC PDP-11/40 with GT44 Graphics
- DEC PDP-11/05 with GT40 Graphics
- Various Z80-based microcomputers (S-100, CP/M)
- IBM Personal Computer
- Western Digital Pascal MicroEngine
- Apple II Plus
- Radio Shack TRS-80
- provides specialized interactive graphics
- provides online and real-time computing services, data acquisition and conversion, and minicomputer services
- provides communications consulting and installation
- maintains computer systems
- provides consulting and configuration of microcomputer systems

PDP 11/70

- located in McLennan Physical Laboratories
- provides UNIX text processing
- 640K of memory
- UNIX (Western Electric)

VAX 11/750

- located in Engineering Annex
- provides Computer Science interactive access
- 2 megabytes of memory
- UNIX (Berkeley)

VAX 11/780

- located in Engineering Annex
- provides Computer Science interactive access
- 4 megabytes of memory
- UNIX (Berkeley)

VAX 11/780

- located in McLennan Physical Laboratories
- provides backup, program testing, and inter-communication relating to student services
- provides Spare Cycle Service
- 4 megabytes of memory
- VMS

VAX 11/750

- located at Scarborough College
- provides "Glass Keypunch" access to HSJS using LIBRA
- 2 megabytes of memory
- VMS

VAX 11/780

- located at Erindale College
- provides "Glass Keypunch" access to HSJS using LIBRA and Research access
- 4 megabytes of memory
- VMS

Consulting and Enquiries

Internal Users Marketing	Dr. Bill Fehlner	MP217	6509
External Users Marketing	Ihor Prociuk	MP217	6875
Erindale College	Peter Wall	2043	828-5311
Scarborough College	Bob Blackburn	S628-A	284-3173

General Enquiries	4990	System Status Enquiries (DEC)	4318
Programming Advising	HELP	System Status Enquiries (IBM)	7393
Access Codes	8703	300 Baud Interactive Services	6200
Account Enquiries (U of T)	8702	1200 Baud Interactive Services	3959
Account Enquiries (External)	7148	DATAPAC	4320 0056
Tape Library (Academic Services)	7319	Telenet	20477
Tape Library (Administrative Services)	6693	Tymnet	<backspace> 30200;;4320 0056
U of T Computer Library	2987		

UTCS Directory

Director	Dr. Doron Cohen	MP350	8948
Associate Director	Allan Heyworth	MP350	4936
Associate Director	Eugene Siciunas	MP350	5058
Assistant Director	William Murphy	MP345	4428
Executive Asst., Research & Planning	Wendy Chin	MP350	5568

Managers

Applications Support & Advising	Don Gibson	MP350	7331
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